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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,268	09/28/2001	E. David Neufeld	COMP:0222	5215

7590   02/08/2005

Intellectual Property Administration
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EXAMINER
NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
2134	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/967,268	NEUFELD, E. DAVID
Office Action Summary	Examiner	Art Unit	
	Andrew L Nalven	2134	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _28 September 2001_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-37_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-37_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _28 September 2001_ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some *   c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _4/17/2002_.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-37 are pending.

Drawings

2.   This application has been filed with informal drawings which are acceptable for

examination purposes only. Formal drawings will be required when the application is

allowed.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

4.   Claims 1 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. The terms "more permanently" and "semi-

permanently" in claims 1 and 6 are relative terms that render the claims indefinite. The

terms "more permanently" and "semi-permanently" are not defined by the claim, the

specification does not provide a standard for ascertaining the requisite degree, and one

of ordinary skill in the art would not be reasonably apprised of the scope of the

invention.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1-16 and 34-35 are rejected under 35 U.S.C. 102(e) as being anticipated

by Nevis et al US Patent No. 6,581,159. Nevis discloses a secure method of updating a

BIOS by using a simple authenticated external module.

7.   With regards to claims 1 and 9, Nevis teaches temporarily loading the boot block

program into a first memory (Nevis, column 5 lines 4-7, random access memory),

verifying the boot block program in the first memory (Nevis, column 5 lines 11-22,

verifying hashes), and if verified, more permanently loading the boot block program into

a second memory (Nevis, column 5 lines 24-30, install update).

8.   With regards to claims 2, 14, Nevis teaches the act of temporarily loading

comprises loading the boot block program into a random access memory (Nevis,

column 5 lines 4-7, random access memory).

9.   With regards to claims 3, 15, Nevis teaches the act of temporarily loading

comprises loading the boot block program into volatile memory (Nevis, column 5 lines 4-

7, random access memory).

10.   With regards to claim 4, Nevis teaches the act of verifying comprising

authenticating the boot block program (Nevis, column 5 lines 11-22, verifying hashes).

11.   With regards to claim 5, Nevis teaches the act of verifying comprising

determining whether the boot block program is operable (Nevis, column 5 lines 11-22,

verifying hashes).

12.   With regards to claim 6 (as best understood), Nevis teaches the act of more

permanently loading comprising the act of semi-permanently loading the boot block

program into the second memory (Nevis, column 5 lines 24-30, install update, Figure 1).

13.   With regards to claims 7, 11, Nevis teaches the act of more permanently loading

comprises the act of loading the boot block program into read only memory (Nevis,

column 3 lines 65 – column 4 line 5).

14.   With regards to claims 8, 12-13, and 35, Nevis teaches the act of more

permanently loading comprises the act of flashing the boot block into flash memory

(Nevis, column 3 lines 65 – column 4 line 5).

15.   With regards to claim 10, Nevis teaches a host computer (Nevis, Figure 2

"Firmware"), an appliance server coupled to the host computer where the applicance

server has a storage memory and an execution memory (Nevis, Figure 2 "User Mode"),

a control operably coupled to the appliance server and to the storage memory to control

storage of programs into the storage memory (Nevis, Figure 2, Item 260, Transfer

control to firmware), the applicant server being adapted to signal the control to permit

the appliance server to storage a program in the storage memory (Nevis, Figure 2 Item

260), and a security device operably coupled to the control, the security device being

adapted to signal the control to permit the host computer to store a program in the

storage memory (Nevis, Figure 2 Item 270).

16.   With regards to claim 16, Nevis teaches the security device being a switch

(Nevis, column 5 lines 15-30, installs if hash values are correct).

17.   With regards to claim 34, Nevis teaches all that is described above and further

teaches the loading of the program over a network connection (Nevis, column 3 lines

51-58, Internet).

18.   Claims 17-23 are rejected under 35 U.S.C. 102(e) as being anticipated by

Spiegel et al US Patent No. 6,711,675.

19.   With regards to claims 17, Spiegel teaches verifying a program of an applicant

server (Spiegel, column 4 lines 38-39) and if not verified, signaling a host computer to

load a replacement program into the appliance server (Spiegel, column 4 lines 40-43).

20.   With regards to claim 18, Spiegel teaches verifying comprising authenticating the

program (Spiegel, column 4 lines 38-39).

21.   With regards to claim 19, Spiegel teaches verifying comprising the act of

determining whether the program is operable (Spiegel, column 4 lines 38-39).

22.   With regards to claim 20, Spiegel teaches act of signaling comprising enabling a

security switch (Spiegel, column 4 lines 38-46).

23.   With regards to claim 21, Spiegel teaches determining whether a security switch

has enabled the host computer to load the replacement program into the applicant

server (Spiegel, column 4 lines 42-43).

24.   With regards to claim 22, Spiegel teaches the program comprising a boot block

program (Spiegel, column 4 lines 38-46, bios).

25.   With regards to claim 23, Spiegel teaches the program comprising firmware

(Spiegel, column 2 lines 22-36).

Claim Rejections - 35 USC § 103

26.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at the time the invention was made to
> a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

27.   Claims 24-31 are rejected under 35 U.S.C. 102(e) as being unpatentable over

Nevis et al US Patent No. 6,581,159 in view of Spiegel et al US Patent No. 6,711,675.

28.   With regards to claim 24, Nevis teaches everything described above, but fails to

teach the reloading of the first program from the execution memory into the storage

memory if the second program is not verified. Spiegel teaches the reloading of the first

program from the execution memory into the storage memory if the second program is
not verified (Spiegel, column 4 lines 40-43, backup bios startup block). At the time the
invention was made, it would have been obvious to a person of ordinary skill in the art to
utilize Spiegel's method of responding to failed authentication with Spiegel's method of
updating a BIOS because it offers the advantage of allowing reprogramming if
tampering is detected (Spiegel, column 1 lines 34-55).

29. With regards to claims 25-26, Nevis as modified teaches the execution memory
comprising random access memory (Nevis, column 5 lines 4-7, random access
memory).

30. With regards to claim 27, Nevis as modified teaches storage memory comprising
read only memory (Nevis, column 3 lines 65 – column 4 line 5).

31. With regards to claims 28-29, Nevis as modified teaches storage memory
comprising non-volatile memory (Nevis, column 3 lines 65 – column 4 line 5, flash
memory).

32. With regards to claim 30, Nevis as modified teaches verifying comprising the act
of authenticating the second program (Spiegel, column 4 lines 38-39).

33. With regards to claim 31, Nevis as modified teaches the verifying of whether the
second program is operable (Spiegel, column 4 lines 41-43, validate backup bios).

34. Claims 36-37 are rejected under 35 U.S.C. 102(e) as being unpatentable over
Nevis et al US Patent No. 6,581,159 in view of Holtey US Patent No. 5,491,827.

35.   With regards to claim 36, Nevis fails to teach the authenticating of a user

directing the loading of the program. Holtey teaches the authenticating of a user

directing the loading of the program (Holtey, column 6 lines 1-20). At the time the

invention was made, it would have been obvious to a person of ordinary skill in the art to

utilize Holtey's authentication mechanism with Nevis's BIOS update system because it

offers the advantage of helping protect configuration information used for power-up or

startup of a system (Holtey, column 3 lines 1-14).

36.   With regards to claim 37, Nevis as modified teaches continuing to load

comprising re-authenticating the user (Holtey, column 6 line 62 – column 7 line 6).

Conclusion

37.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Andrew L Nalven whose telephone number is 571 272

3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate

Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Gregory Morse can be reached on 571 272 3838. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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